Product Description: T315XW02 TFT-LCD PANEL	
AUO Model Name: T315XW02 V7	
Customer Part No/Project Name: **SONY(WAX2)**	

Customer Signature	Date	AUO	Date: 2006/10/25
		Approved By: PM director/ PL Chen	
		Reviewed By: RD director / Hong Jye Hong	
		Prepared By: Product Manager/ Sammi Lin	

Document Version : 0.1

Date : 2006/10/25

Product Specifications

31.5" WXGA Color TFT-LCD Module
Model Name: T315XW02 V7

( ) Preliminary Specifications
(*) Final Specifications

Contents

Record of Revision

Version	Date	No	Old Description	New Description	Remark
0.0	2006/07/28		First issue		
0.1	2006/10/25		Front and Back Drawing	Remove emboss and add FFC tape	Page.21,22
		2	Vibration spec(with carton) Vibration leval:1.5Grms	Vibration spec(with carton) Vibration leval:0.83Grms	Page.23
		8	Drop spec(with carton) Drop height:53.3cm	Drop spec(with carton) Drop height:46.0cm	Page.23
			Packing carton label Q'ty:3	Packing carton label Q'ty:4	Page .25
			Carton and Palletizing sequence revised.	Carton and Palletizing sequence revised.	Page.27

1. General Description

This specification applies to the 31.51 inch Color TFT-LCD Module T315XW02 V7. This LCD module has a TFT active matrix type liquid crystal panel 1366x768 pixels, and diagonal size of 31.51 inch. This module supports 1366x768 XGA-WIDE mode (Non-interlace).

Each pixel is divided into Red, Green and Blue sub-pixels or dots which are arranged in vertical stripes. Gray scale or the brightness of the sub-pixel color is determined with a 8-bit gray scale signal for each dot.

The T315XW02 V7 has been designed to apply the 8-bit 1 channel LVDS interface method. It is intended to support displays where high brightness, wide viewing angle, high color saturation, and high color depth are very important.

☐ General Information

| Items	Specification	Unit	Note
Active Screen Size	31.51 inches		
Display Area	697.685 (H) x 392.256(V)	mm	
Outline Dimension	760.0(H) x 450.0(V) $\times$ 47.7(D)	mm	With inverter
Driver Element	a-Si TFT active matrix		
Display Colors	16.7M	Colors	
Number of Pixels	1366 x 768	Pixel	
Pixel Pitch	0.51075	mm	
Pixel Arrangement	RGB vertical stripe		
Display Mode	Normally Black		
Surface Treatment	AG, 3H		
RoHS	RoHS compliance		

2. Absolute Maximum Ratings

The following are maximum values which, if exceeded, may cause permanent damage to the unit.

Item	Symbol	Min	Max	Unit	Conditions
Logic/LCD Drive Voltage	Vcc	-0.3	7.0	[Volt]	Note 1
Input Voltage of Signal	Vin	-0.3	5.25	[Volt]	Note 1
BLU Input Voltage	VDDB	-0.3	19	[Volt]	Note 1
BLU Brightness Control Voltage	VBLON	-0.3	2.8	[Volt]	Note 1
Operating Temperature	TOP	0	+50	[^{o}C]	Note 2
Operating Humidity	HOP	10	90	[%RH]	Note 2
Storage Temperature	TST	-20	+60	[^{o}C]	Note 2
Storage Humidity	HST	10	90	[%RH]	Note 2
Panel Surface Temperature		-	65	[^{o}C]	Note 2

Note 1: Duration: 50 msec.

Note 2 : Maximum Wet-Bulb should be 39℃ and No condensation.

The relative humidity must not exceed 90% non-condensing at temperatures of 40℃ or less. At temperatures greater than 40℃, the wet bulb temperature must not exceed 39℃.
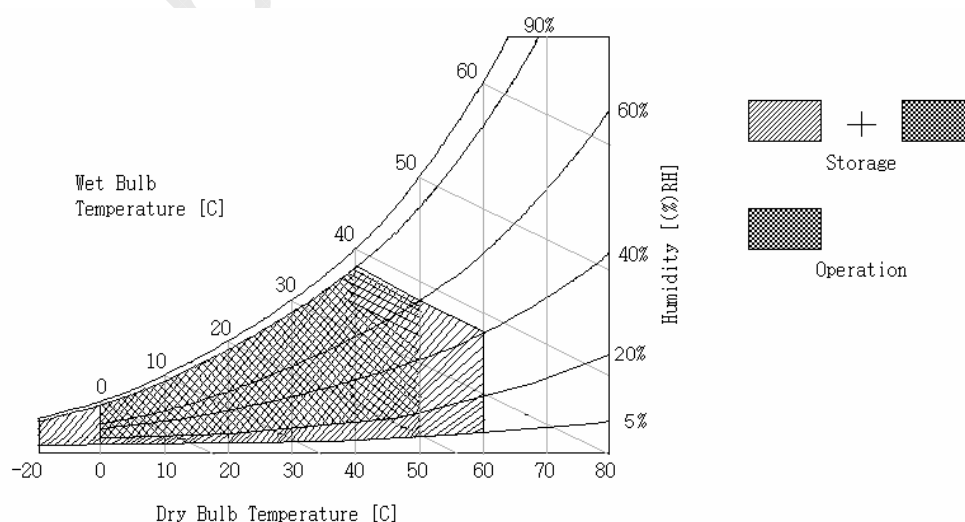
3. Electrical Specification

The T315XW02 V7 requires two power inputs. One is employed to power the LCD electronics and to drive the TFT array and liquid crystal. The second input power for the BLU, is to power inverter..

3-1 Electrical Characteristics

| Parameter			Values			Unit	Notes
			Min	Typ	Max		
LCD:							
Power Supply Input Voltage		Vcc	4.5	5.0	5.5	Vdc	1
Power Supply Input Current		Icc	-	1.2	1.5	A	2
Power Consumption		Pc	-	6.0	7.5	Watt	2
Inrush Current		I_{RUSH}	-	-	4	Apeak	3
LVDS Interface	Differential Input High Threshold Voltage	VTH			+100	mV	4
	Differential Input Low Threshold Voltage	VTL	-100			mV	4
	Common Input Voltage	VCIM	1.10	1.25	1.40	V	
CMOS Interface	Input High Threshold Voltage	VIH (High)	2.4		3.3	Vdc	
	Input Low Threshold Voltage	VIL (Low)	0		0.7	Vdc	
Backlight Power Consumption		PDDB	77.4	85.5	93.6	Watt	
Life Time			50,000			Hours	

Note :

1. The ripple voltage should be controlled under 10% of V$_{CC}$

2. Vcc=5.0V, $f_v = 60$Hz, fCLK=81.5Mhz , 25℃, Test Pattern : White Pattern

3. Measurement condition :
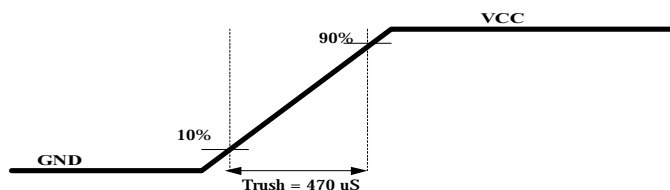
4. VCIM = 1.2V
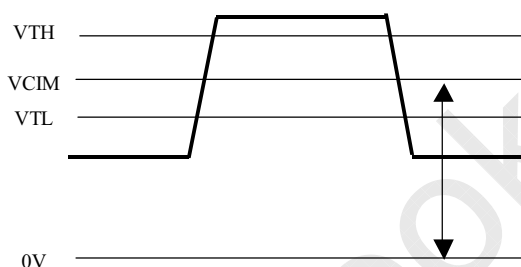
5. The performance of the Lamp in LCM, for example life time or brightness, is extremely influenced by the characteristics of the DC-AC Inverter. So all the parameters of an inverter should be carefully designed so as not to produce too much leakage current from high-voltage output of the inverter. When you design or order the inverter, please make sure unwanted lighting caused by the mismatch of the lamp and the inverter (no lighting, flicker, etc) never occurs. When you confirm it, the LCD Assembly should be operated in the same condition as installed in your instrument.

6. Do not attach a conducting tape to lamp connecting wire. If the lamp wire attach to conducting tape, TFT-LCD Module have a low luminance and the inverter has abnormal action because leakage current occurs between lamp wire and conducting tape.

7. The relative humidity must not exceed 80% non-condensing at temperatures of 40 ℃ or less. At temperatures greater than 40℃, the wet bulb temperature must not exceed 39℃. When operate at low temperatures, the brightness of CCFL will drop and the life time of CCFL will be reduced.

3-2 Interface Connections
- LCD connector : S41B-PH-SM3-TB

- LVDS Transmitter: DS90C385 (NS).

PIN No.	Description	PIN No.	Description
1	DC Power Supply	21	LVDS Clock+
2	DC Power Supply	22	Ground
3	DC Power Supply	23	RxIN3-
4	DC Power Supply	24	Rxin3+
5	DC Power Supply	25	GND
6	Ground	26	NC
7	Ground	27	NC
8	Ground	28	NC
9	Ground	29	Reserved
10	Ground	30	Reserved
11	RxIN0-	31	NC
12	Rxin0+	32	NC
13	Ground	33	NC
14	RxIN1-	34	NC
15	Rxin1+	35	NC
16	Ground	36	NC
17	RxIN2-	37	NC
18	Rxin2+	38	NC
19	Ground	39	Reserved
20	LVDS Clock-	40	Reserved
		41	Reserved

Note:
1. All GND (ground) pins should be connected together and should also be connected to the LCD's metal frame. All Vcc (power input) pins should be connected together.

Block diagram for TFT-LCD module
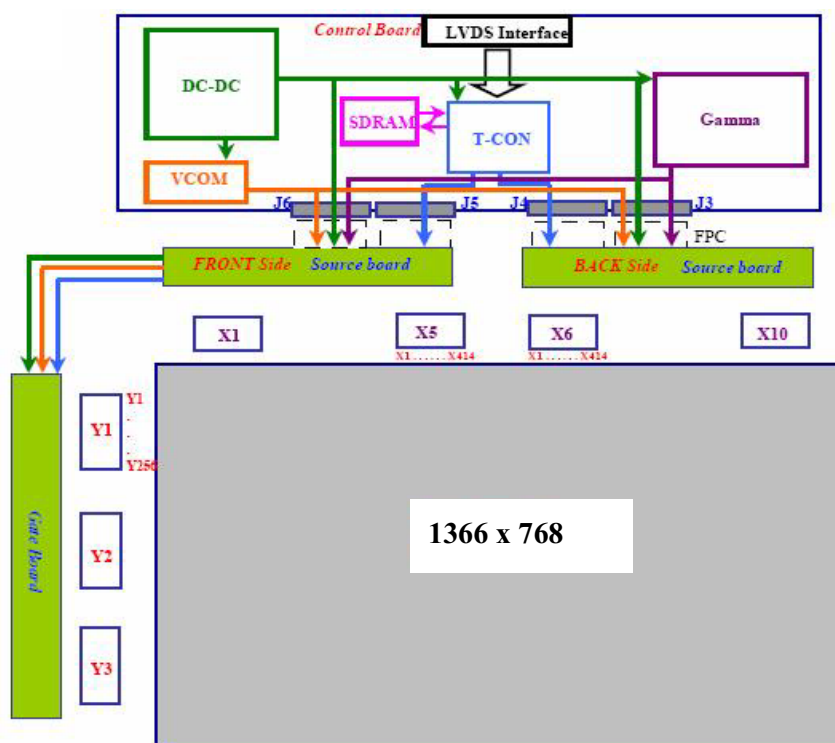
3-3 BACKLIGHT CONNECTOR PIN CONFIGURATION –

3-3.1Electrical specification

ITEM	SYMBOL		CONDITION	MIN	TYP	MAX	UNIT	Note
Input Voltage	V_{DDB}		---	16	18	19	VDC	
Input Current (Stable Condition)	I_{DDB}		VDDB=18V	4.3	4.75	5.2	ADC	1
Input Power (Stable Condition)	P_{DDB}		VDDB=18V	77.4	85.5	93.6	W	1
ON/OFF Control Voltage	V_{BLON}	ON	VDDB=18V	2.0	---	5.0	ADC	1,2
		OFF	VDDB=18V	0.0	---	0.8	VDC	
ON/OFF Control Current	I_{BLON}		VDDB=18V	0.0	---	1.5	mADC	
Dimming Control Current	V_{DIM}	MAX	VDDB=18V	---	2.2	---	VDC	
		MIN	VDDB=18V	---	0.0	---		

Note1 : Condition : VDDB=18.0 V, VDIM= 2.2V (Ta=25±5℃, Turn on for 45minutes)

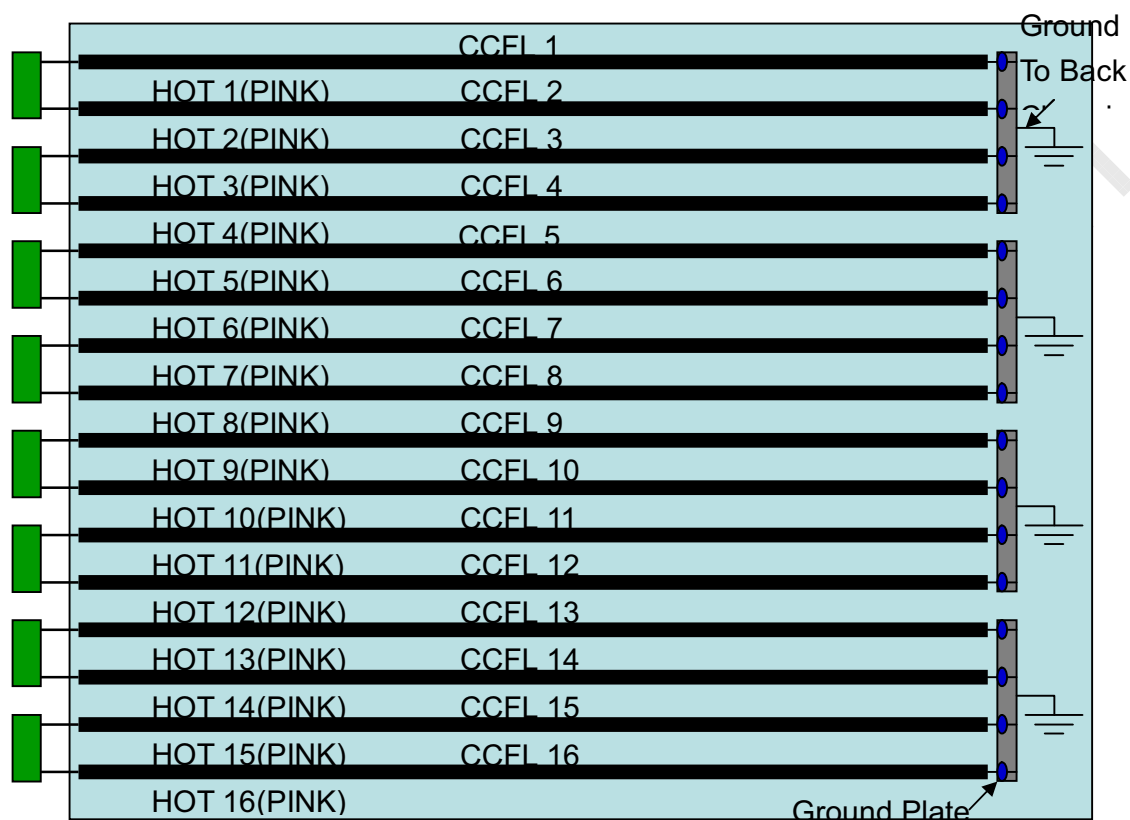Note 2 : Measurement condition Rising time = 20 ms (VDDB : 10%~90%);

3-3.2 Input specification

CN1:   S14B-PH-SM3-TB(JST)

No	Symbol	Description
1	VDDB (Main Power)	DC input 18.0 VDC
2	VDDB (Main Power)	DC input 18.0 VDC
3	VDDB (Main Power)	DC input 18.0 VDC
4	VDDB (Main Power)	DC input 18.0 VDC
5	VDDB (Main Power)	DC input 18.0 VDC
6	GND	Ground
7	GND	Ground
8	GND	Ground
9	GND	Ground
10	GND	Ground
11	DET	Panel status detect (0~ 0.8V=Fail)
12	VBLON (Enable Pin)	On/Off control Signal; 5V:On/ 0V:Off
13	VDIM (LCD Bright)	Analog Dimming control signal input (0~2.2V) (2.2V : Max, 0V: Min brightness)
14	GND	Signal Ground

3-3.3. Backlight Diagram)

	CCFL 1	Ground
HOT 1(PINK)	CCFL 2	To Back
HOT 2(PINK)	CCFL 3	
HOT 3(PINK)	CCFL 4	
HOT 4(PINK)	CCFL 5	
HOT 5(PINK)	CCFL 6	
HOT 6(PINK)	CCFL 7	
HOT 7(PINK)	CCFL 8	
HOT 8(PINK)	CCFL 9	
HOT 9(PINK)	CCFL 10	
HOT 10(PINK)	CCFL 11	
HOT 11(PINK)	CCFL 12	
HOT 12(PINK)	CCFL 13	
HOT 13(PINK)	CCFL 14	
HOT 14(PINK)	CCFL 15	
HOT 15(PINK)	CCFL 16	
HOT 16(PINK)		Ground Plate

3-4 Signal Timing Specifications

This is the signal timing required at the input of the User connector. All of the interface signal timing should be satisfied with the following specifications for it's proper operation.

☐ Timing Table

DE only Mode

Signal	Item	Symbol	Min	Typ.	Max	Unit
Vertical Section	V Total	Tv	789	806	1000	Th
	Active	Tdisp(v)	768	768	768	Th
	Blanking	Tblk(v)	21	38	232	Th
Vertical Section	H Total	Tv	1414	1560	1722	Tclk
	Active	Tdisp(v)	1366	1366	1366	Tclk
	Blanking	Tblk(v)	48	194	356	Tclk
Pixel Clock	Frequency	1/Tclk	65	76	88	Mhz
Vertical Frequency	Frequency	Fv	47	60	63	Hz
Horizontal Frquency	Frequency	Fh	43	48	53	kHz

▤ Display position is specific by the rise of DE signal only.

Horizontal display position is specified by the rising edge of 1st DCLK after the rise of 1st DE, is displayed on the left edge of the screen.

Vertical display position is specified by the rise of DE after a "Low" level period equivalent to eight times of horizontal period. The 1st data corresponding to one horizontal line after the rise the of 1st DE is displayed at the top line of screen.

3.) If a period of DE "High" is less than 1366 DCLK or less than 768 lines, the rest of the screen displays black.

4.) The display position does not fit to the screen if a period of DE "High" and the effective data period do not synchronize with each other.

3-5 Signal Timing Waveforms
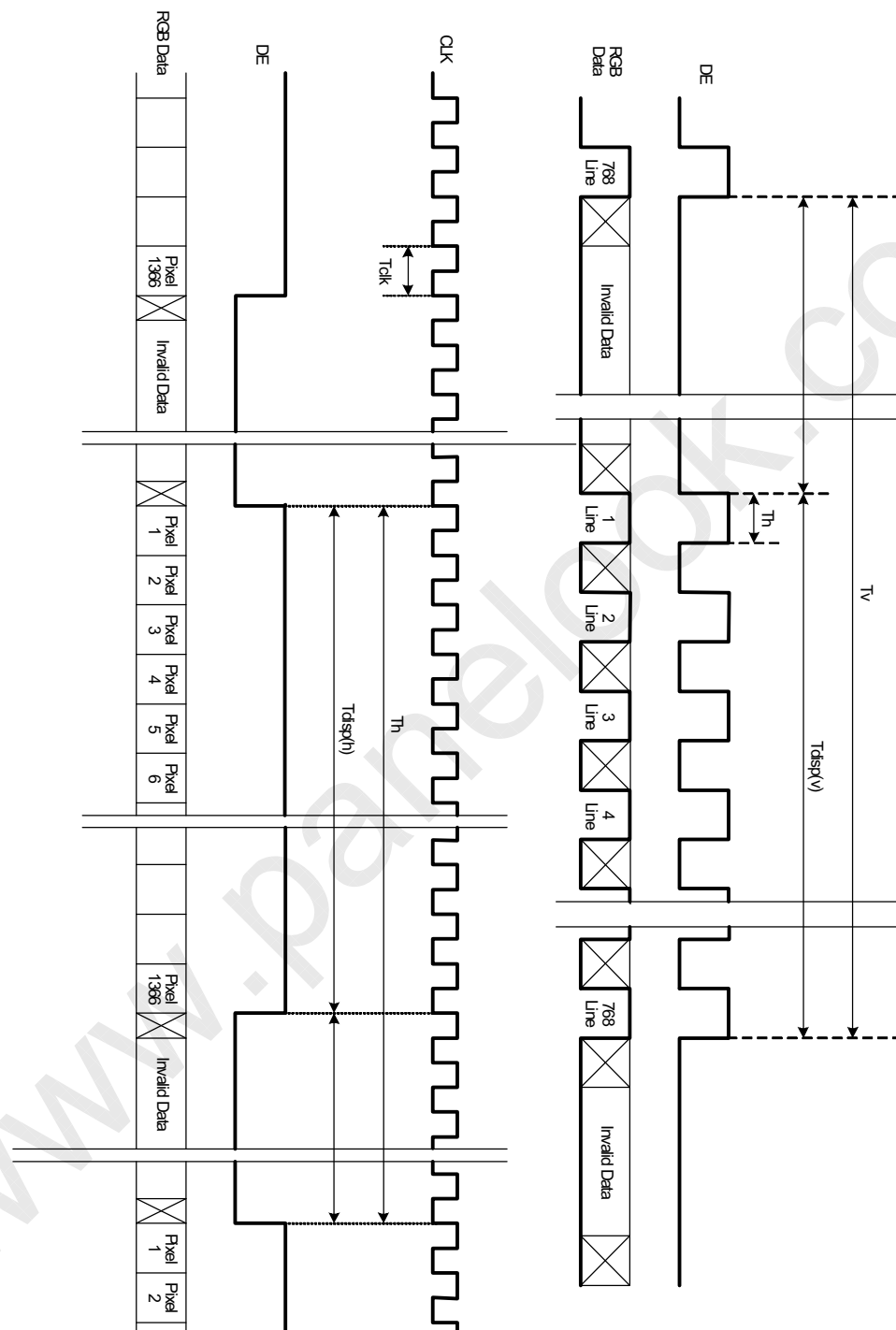
3-6 Color Input Data Reference

The brightness of each primary color (red, green and blue) is based on the 8 bit gray scale data input for the color; the higher the binary input, the brighter the color. The table below provides a reference for color versus data input.

COLOR　DATA　REFERENCE

Color		Input Color Data																							
		RED MSB LSB								GREEN MSB LSB								BLUE MSB LSB								
		R7	R6	R5	R4	R3	R2	R1	R0	G7	G6	G5	G4	G3	G2	G1	G0	B7	B6	B5	B4	B3	B2	B1	B0
Basic Color	Black	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Red(255)	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Green(255)	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
	Blue(255)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1
	Cyan	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Magenta	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1
	Yellow	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
	White	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
RED	RED(000)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	RED(001)	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	RED(254)	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	RED(255)	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GREEN	GREEN(000)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	GREEN(001)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0

	GREEN(254)	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0
	GREEN(255)	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
BLUE	BLUE(000)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	BLUE(001)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

	BLUE(254)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0
	BLUE(255)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1

3-7 Power Sequence for LCD Module

3-7.1 Power Sequence for LCD

| Power Supply For LCD Vcc (+5V) | | |
| Interface Signal (LVDS data & CLK) | Valid Data | |
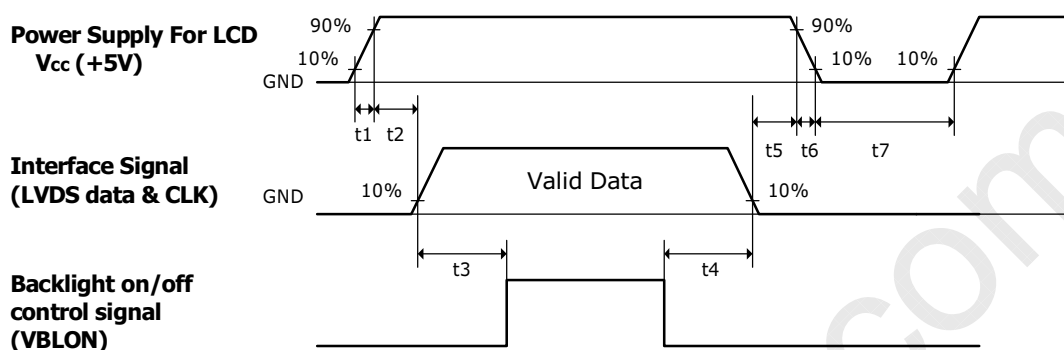
Parameter	Values			Units
	Min.	Typ.	Max.	
t1	1		30	ms
t2	10		80	ms
t3	550 (Note 2)			ms
t4	100			ms
t5	50			ms
t6	0.47		30	ms
t7	300			ms

Note 1:

　　Apply the lamp voltage within the LCD operation range. When the back-light turns on before the LCD operation or the LCD turns off before the back-light turns off, the display may momentarily become abnormal screen.

Note 2:

　　a. 200ms~550ms: Without turning color temperature might happen in this period

　　b. >550ms: normal operation period, with color temperature turning

4. Optical Specification

Optical characteristics are determined after the unit has been 'ON' and stable for approximately 45 minutes in a dark environment at 25℃. The values specified are at an approximate distance 50cm from the LCD surface at a viewing angle of Φ and θequal to 0°.

 Fig.1 1 presents additional information concerning the measurement equipment and method.
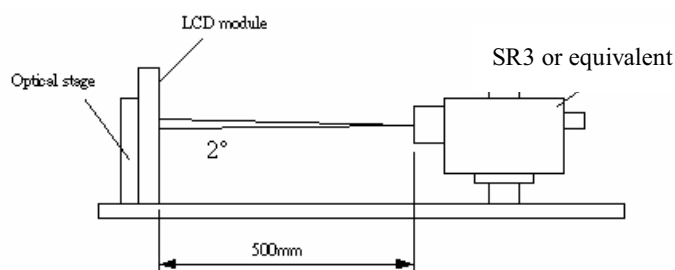
Parameter		Symbol		Values			Units	Notes
				Min.	Typ.	Max.		
Contrast Ratio		CR		1000	1200			1
Surface Luminance, white		LWH		430	530		cd/㎡	2
Luminance Variation		δWHITE	9 p			1.30		3
Response time	Gray to Gray	Tγ			8		Ms	4
Color Gamut		NTSC			72		%	
Color Coordinates								
	RED	RX			0.640			
		RY			0.340			
	GREEN	GX			0.290			
		GY		Typ.-0.03	0.600	Typ.+0.03		
	BLUE	BX			0.145			
		BY			0.055			
	WHITE	WX			0.282			
		WY			0.284			
Viewing Angle								
x axis, right(φ=0°)		θr		75	89		Degree	6
x axis, left(φ=180°)		θl		75	89			
y axis, up(φ=90°)		θu		75	89			
y axis, down (φ=0°)		θd		75	89			

Note:

1. Contrast Ratio (CR) is defined mathematically as:

$$\text{Contrast Ratio} = \frac{\text{Surface Luminance of } L_{on1}}{\text{Surface Luminance of } L_{off1}}$$

2. Surface luminance is luminance value at point 1 across the LCD surface 50cm from the surface with all pixels displaying white. From more information see FIG 2. When VDDB = 17.5V, IDDB = TBD　L_{WH}=Lon1 ,Where Lon1 is the luminance with all pixels displaying white at center 1 location.

3. The variation in surface luminance, δWHITE is defined (center of Screen) as:

$$\delta_{WHITE(9P)} = \text{Maximum}(L_{on1}, L_{on2},\ldots,L_{on9})/ \text{Minimum}(L_{on1}, L_{on2},\ldots L_{on9})$$

4. Response time is the time required for the display to transition from black to white(Rise Time, Tr_R) and from white to black (Decay Time, Tr_D). For additional information see FIG3.

5. Tγ is the response time between any two gray scale and is based on f_v=60Hz to optimize.

6. Viewing angle is the angle at which the contrast ratio is greater than 10. The angles are determined for the horizontal or x axis and the vertical or y axis with respect to the z axis which is normal to the LCD surface. For more information see FIG4.

7. Gamma curve is test at normal direction.

FIG. 2 Luminance
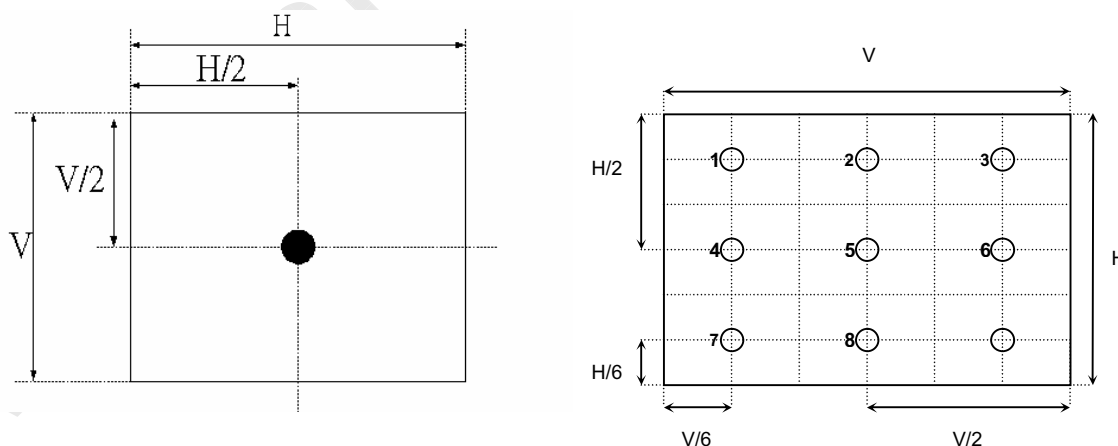
FIG.3 Response Time

The response time is defined as the following figure and shall be measured by switching the input signal for "any level of gray(bright) " and "any level of gray(dark)".
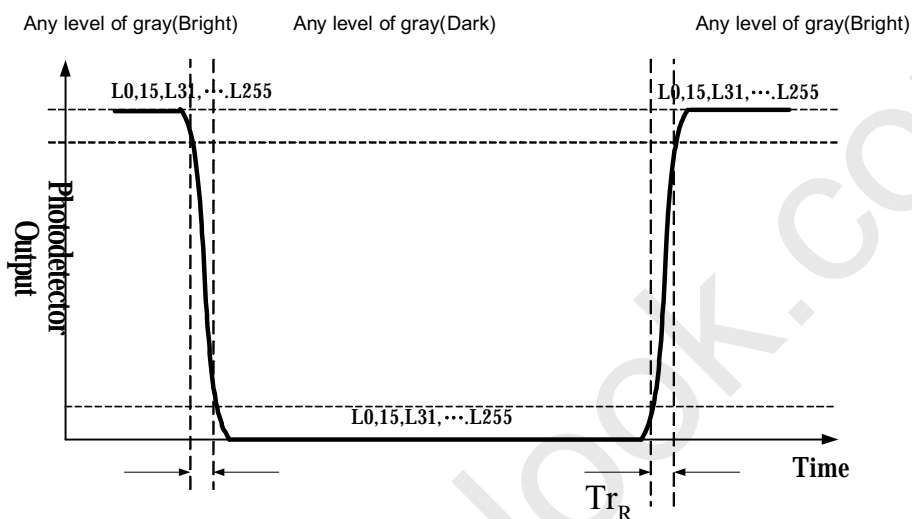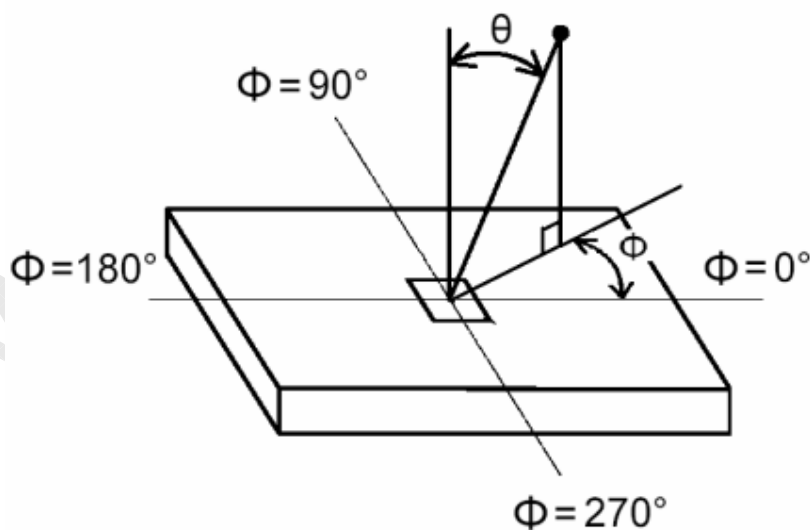

FIG.4 Viewing angle

5. Mechanical Characteristics

The contents provide general mechanical characteristics for the model T315XW02 V7. In addition the figures in the next page are detailed mechanical drawing of the LCD.

Outline Dimension	Horizontal	760.0mm
	Vertical	450.0mm
	Depth	47.7mm
Bezel Opening	Horizontal	702.8mm
	Vertical	398.4mm
Active Display Area	Horizontal	697.68mm
	Vertical	392.26mm
Weight	7200g　Typ.	
Surface Treatment	AG, 3H	
Torque on bottom chassis user holes	M3: min 8kgf·cm M4: min 10kgf·cm	

Front
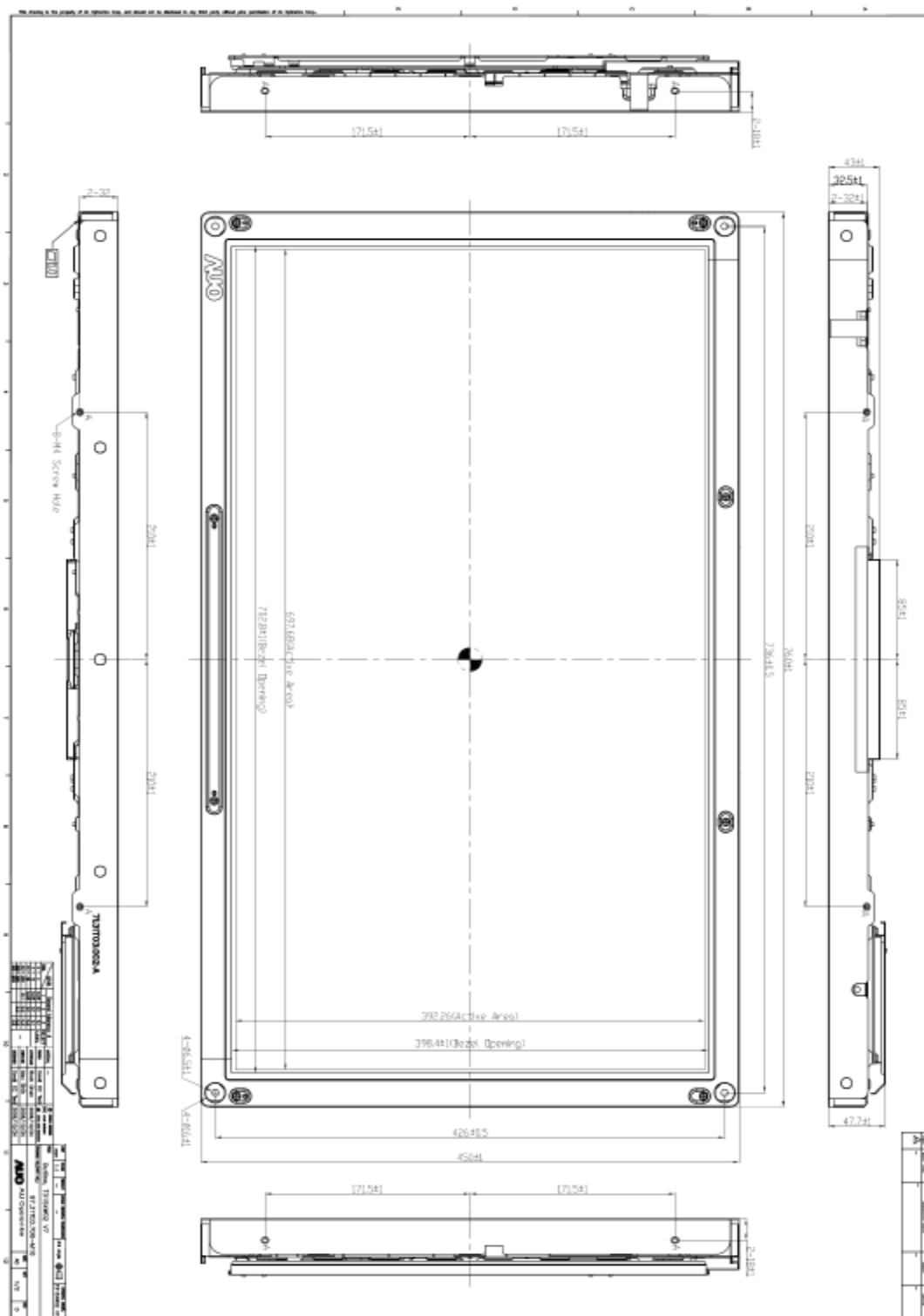
January, 2003 All Rights Reserved.   T315XW02 V7   -   Specs. Ver 0.1   21/29

Back

6. Reliability

Environment test condition

No	Test Item	Condition
1	**High temperature storage test**	Ta=60℃　300h judge
2	**Low temperature storage test**	Ta=-20℃　300h judge
3	**High temperature operation test**	Ta=50℃ 80%RH　300h judge
4	**Low temperature operation test**	Ta=-5℃　300h judge
5	**Vibration test (non-operating)**	Wave form: Random Vibration level: 1.5G RMS Bandwidth: 10-300Hz Duration: X, Y, Z 30min each direction
6	**Shock test (non-operating)**	Shock level: 50G Waveform: half since wave, 11ms Direction: ±X, ±Y, ±Z One time each direction
7	**Vibration test (with carton)**	Wave form: Random Vibration level: 0.83Grms, Bandwidth: 5~50Hz Duration: Z direction 20min
8	**Drop test (with carton)**	Height: 46.0cm 1 corner, 3 edges, 6 surfaces (ASTMD4169-I)
9	**Altitude Storage/shipment**	50,000 feet (12Kpa)

7. **International Standard**

7-1. Safety

(1) UL6500, Underwriters Laboratories, Inc. (AUO file number : E204356)

Standard for Safety of Information Technology Equipment Including electrical Business Equipment.

(2) CAN/CSA C22.2 No. 950-95 Third Edition, Canadian Standards Association, Jan. 28, 1995

Standard for Safety of Information Technology Equipment Including Electrical Business Equipment.

(3) EN60950 : 1992+A2: 1993+A2: 1993+C3: 1995+A4: 1997+A11: 1997

IEC 950: 1991+A1: 1992+A2: 1993+C3: 1995+A4:1996

IEC 60065 (AUO Certificate number : JPTUV-008549)

European Committee for Electro technical Standardization (CENELEC)

EUROPEAN STANDARD for Safety of Information Technology Equipment Including Electrical Business Equipment.

7-2. EMC

a) ANSI C63.4 "Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electrical Equipment in the Range of 9kHz to 40GHz. "American National standards Institute(ANSI), 1992

b) C.I.S.P.R "Limits and Methods of Measurement of Radio Interface Characteristics of Information Technology Equipment." International Special committee on Radio Interference.

c) EN 55022 "Limits and Methods of Measurement of Radio Interface Characteristics of Information Technology Equipment." European Committee for Electrotechnical Standardization. (CENELEC), 1998
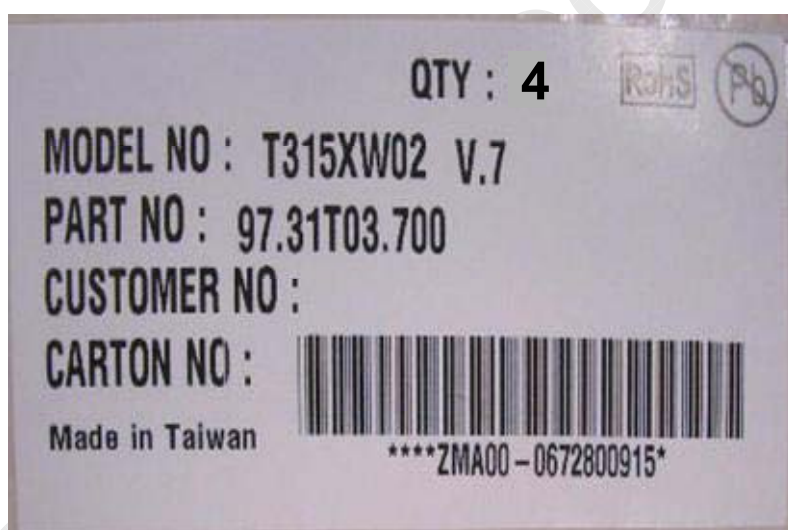
8. Packing
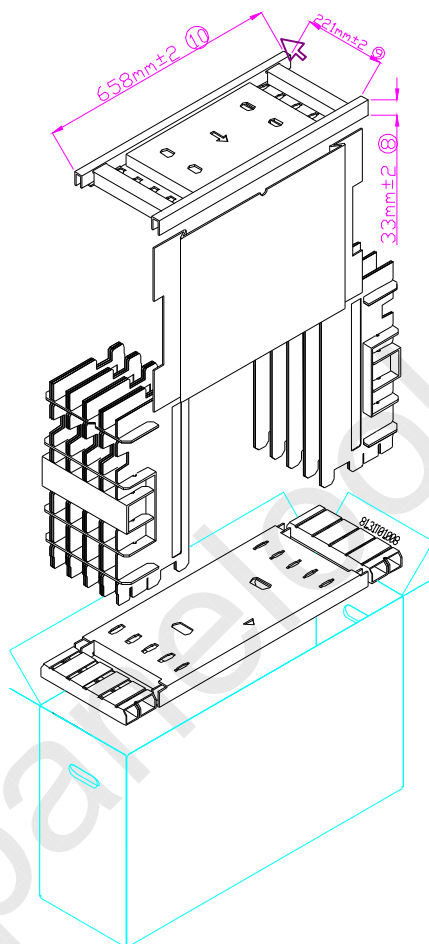
Panel label:

Carton Label :

Carton :

878(L)mm *283(W)mm * 535(H)mm

Palletizing sequence:

(1) By air : (4*1) *2 layers, one pallet put 8 boxes, total 32 pcs module.

(2) By sea : HQ container (4*1) * 4 layers, one pallet put 16 boxes, total 64 pcs module.

	Item	Specification			Packing
		Qty.	Dimension	Weight (kg)	Remark
1	Packing BOX	4pcs/box	878(L)mm*290(W)mm*535(H)mm	33	
2	Pallet	1	114(L)mm*890 (W)mm*120(H)mm	10	
3	Boxes per Pallet	8 boxes/Pallet			
4	Panels per Pallet	32 pcs/pallet			
5	Pallet after packing	52 pallet/container	1140(L)mm*890(W)mm*120(H)mm	274	

Corner angle   Moisture-proof film

Stretch film

Label   PET band

Corner angle

Pallet
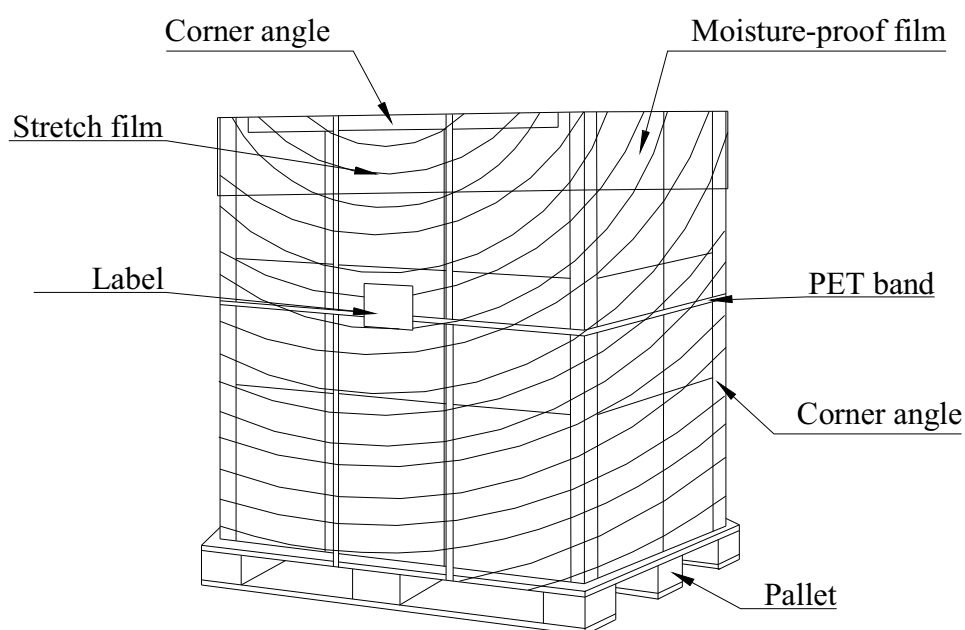
9. PRECAUTIONS

Please pay attention to the followings when you use this TFT LCD module.

9-1 MOUNTING PRECAUTIONS

(1) You must mount a module using holes arranged in four corners or four sides.

(2) You should consider the mounting structure so that uneven force (ex. Twisted stress) is not applied to module. And the case on which a module is mounted should have sufficient strength so that external force is not transmitted directly to the module.

(3) Please attach the surface transparent protective plate to the surface in order to protect the polarizer. Transparent protective plate should have sufficient strength in order to the resist external force.

(4) You should adopt radiation structure to satisfy the temperature specification.

(5) Acetic acid type and chlorine type materials for the cover case are not desirable because the former generates corrosive gas of attacking the polarizer at high temperature and the latter causes circuit break by electro-chemical reaction.

(6) Do not touch, push or rub the exposed polarizers with glass, tweezers or anything harder than HB pencil lead. And please do not rub with dust clothes with chemical treatment. Do not touch the surface of polarizer for bare hand or greasy cloth. (Some cosmetics are detrimental to the polarizer.)

(7) When the surface becomes dusty, please wipe gently with absorbent cotton or other soft materials like chamois soaks with petroleum benzene. Normal-hexane is recommended for cleaning the adhesives used to attach front/ rear polarizers. Do not use acetone, toluene and alcohol because they cause chemical damage to the polarizer.

(8) Wipe off saliva or water drops as soon as possible. Their long time contact with polarizer causes deformations and color fading.

(9) Do not open the case because inside circuits do not have sufficient strength.

9-2 OPERATING PRECAUTIONS

(1) The spike noise causes the mis-operation of circuits. It should be lower than following voltage: V=±200mV(Over and under shoot voltage)

(2) Response time depends on the temperature. (In lower temperature, it becomes longer..)

(3) Brightness depends on the temperature. (In lower temperature, it becomes lower.) And in lower temperature, response time (required time that brightness is stable after turned on) becomes longer.

(4) Be careful for condensation at sudden temperature change. Condensation makes damage to polarizer or electrical contacted parts. And after fading condensation, smear or spot will occur.

(5) When fixed patterns are displayed for a long time, remnant image is likely to occur.

(6) Module has high frequency circuits. Sufficient suppression to the electromagnetic interference shall be done by system manufacturers. Grounding and shielding methods may be important to minimize the interface.

9-3 ELECTROSTATIC DISCHARGE CONTROL

Since a module is composed of electronic circuits, it is not strong to electrostatic discharge. Make certain that treatment persons are connected to ground through wrist band etc. And don't touch interface pin directly.

9-4 PRECAUTIONS FOR STRONG LIGHT EXPOSURE

Strong light exposure causes degradation of polarizer and color filter.

9-5 STORAGE

When storing modules as spares for a long time, the following precautions are necessary.

(1) Store them in a dark place. Do not expose the module to sunlight or fluorescent light. Keep the temperature between 5℃ and 35℃ at normal humidity.

(2) The polarizer surface should not come in contact with any other object. It is recommended that they be stored in the container in which they were shipped.

9-6 HANDLING PRECAUTIONS FOR PROTECTION FILM

(1) The protection film is attached to the bezel with a small masking tape. When the protection film is peeled off, static electricity is generated between the film and polarizer. This should be peeled off slowly and carefully by people who are electrically grounded and with well ion-blown equipment or in such a condition, etc.

(2) When the module with protection film attached is stored for a long time, sometimes there remains a very small amount of flue still on the Bezel after the protection film is peeled off.

(3) You can remove the glue easily. When the glue remains on the Bezel or its vestige is recognized, please wipe them off with absorbent cotton waste or other soft material like chamois soaked with normal-hexane.